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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,000	07/22/2003	Gary William Flake	600189-148	8179
76041	7590	11/26/2008		
YAHOO! INC. C/O DREIER LLP 499 PARK AVENUE NEW YORK, NY 10022			EXAMINER KARDOS, NEIL R	
			ART UNIT 3623	PAPER NUMBER
			MAIL DATE 11/26/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/625,000

Applicant(s)

FLAKE ET AL.

Examiner

Neil R. Kardos

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is a **NON-FINAL** Office action on the merits in response to the request for continued examination filed on November 10, 2008. Claim 8 has been cancelled. Currently, claims 1-7 and 9-14 are pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 10, 2008 has been entered.

Response to Arguments

Applicant argues the following:

(A) Skinner does not teach *obtaining quantitative data associated with the concept, wherein the concept comprises a set of search terms relating to a common theme* (see Remarks, pages 10-12).

Argument (A) has been considered but is not persuasive. Applicant asserts that Skinner "fails to teach or suggest a set of one or more search terms...but instead teaches a systems that allows an advertiser to calculate a bid for a single search term [and that] using such a system for a single search term is not the equivalent of using such a system for a concept that comprises multiple search terms..." (see Remarks, page 11). However, in Applicant's specification, a

"term" is defined as including "one or more characters, character strings, letters, words, phrases, abbreviations, sentences, or symbols of any kind." (emphasis added; see ¶ 36 of pre-grant publication; page 10, lines 2-4 of originally filed specification). Skinner teaches obtaining quantitative data associated with "search terms" (see ¶¶ 12 and 37-38), which are recognized in the art as consisting of a word or group of words. A word or group of words contains a set of characters, characters strings, letters, or words (Applicant's definition of a "term"); thus, Skinner teaches a concept (Skinner's "search term") comprising a set of "terms" (characters, strings, letters, or words) relating to a common theme (e.g. a group of letters arranged to create a word, or a group of words arranged to create a concept).

For the sake of advancing prosecution, Examiner anticipates that Applicant will amend the claims to overcome the rejection of this limitation based upon Skinner; thus, Examiner has supplied an additional reference, Marks (US 2001/0051911), which more specifically discloses combining search terms into concepts (see figures 2A and 2B; ¶ 10).

(B) Skinner does not teach *electronically operating on the quantitative data to produce a quantitative statistic by using at least one of: a total revenue per period calculation; a median revenue per period calculation; an average revenue per period calculation; an average of median bidded price calculation; a median of median clicked price calculation; and a median click calculation* (see Remarks, pages 11-12).

Argument (B) has been considered but is not persuasive. Applicant's argument is based in part upon Applicant's assertion in argument (A), above. (see page 12, ¶ 2: "As Skinner fails to

teach or suggest a concept comprising a set of one or more search terms that relate to a common theme, so too does Skinner fail to teach or suggest operating on data associated with a concept..."). Examiner maintains that Applicant is incorrect in the assertion that Skinner does not teach the limitation in Argument (A); thus, the first part of Applicant's argument is also incorrect. Examiner also notes that it would be obvious to apply quantitative statistics for a single search term to a group of related search terms.

Applicant also asserts that "collecting and analyzing data relating to the number of impressions, the number of clicks, and the number of resulting sales generated by a search term is not the same as quantitative data associated with the concept as presently claimed." (see Remarks, page 11). Skinner at least suggests a "total revenue per period calculation" by disclosing "the number of resulting sales at differing times of day, month, or year" (see ¶ 38) and "the amount of purchase if a purchase was made" (see ¶ 41). Furthermore, Examiner takes Official Notice that all of the claimed quantitative statistics were well-known in the art at the time the invention was made. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed quantitative statistics to determine Skinner's search term's effectiveness. One of ordinary skill in the art would have been motivated to do so for the benefit of tailoring their bidding decision to what they believe is the most accurate measure of effectiveness.

Response to Amendment

Applicant's amendments to the claims have been acknowledged. These amendments are sufficient to overcome the § 101 rejections set forth in the previous Office action. Accordingly,

the § 101 rejections are withdrawn. New grounds of rejection under § 103 have been set forth below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner (US 2003/0105677) in view of Marks (US 2001/0051911), and further in view of Hanson, "Idea Futures: Encouraging and Honest Consensus."

Claim 1: Skinner discloses in a computerized system for allowing transactions in instruments, the instruments being capable of being valued based on values of term-based concepts, and terms of the concepts being useable in computerized searches, a method for valuing a concept, the method comprising:

- obtaining quantitative data associated with the concept (see ¶ 38; ¶ 12: lines 1-9, disclosing tracking search terms to determine effectiveness based on a number of impressions, number of clicks, and number of sales; see also "Response to Arguments" section, above);
- electronically operating on the quantitative data to produce a quantitative statistic by using at least one of: a total revenue per period calculation; a median revenue per period calculation; an average revenue per period calculation; an average of

median bidded price calculation; a median of median clicked price calculation; and a median click calculation (see id., disclosing analyzing the data as well as collecting it; ¶ 41, disclosing the amount of a purchase; see also “Response to Arguments” section, above); and

- electronically determining a value of the concept based at least in part on the produced statistic such that the value is used in the computerized system allowing transactions in the instruments (see id., disclosing determining the search terms effectiveness to advertising and marketing; paragraphs 12 and 37, disclosing using the value in a computer).

Skinner also discloses wherein the concept comprises a set of search terms relating to a common theme (see “Response to Arguments” section, above). Moreover, Marks discloses a more narrow interpretation of this limitation (see figures 2A and 2B; ¶ 10; see also “Response to Arguments” section, above). Skinner and Marks are both directed to bidding and ranking in search engines. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the bidding system of Marks (including “concept” groupings) and the bidding system of Skinner. One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies gained by purchasing a group of key words rather than individual key words (see e.g. Marks, ¶ 3).

Examiner takes Official Notice that all of the claimed quantitative statistics were well-known in the art at the time the invention was made. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed quantitative statistics to determine Skinner’s search term’s effectiveness. One of ordinary skill in the art

would have been motivated to do so for the benefit of tailoring their bidding decision to what they believe is the most accurate measure of effectiveness.

Skinner does not explicitly disclose electronically determining a value of one or more instruments based at least in part on the value of the concept. Hason discloses an “idea futures market” wherein people would exchange coupons representing concepts (see at least “Procedures” section on page 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Hanson’s idea futures market to the search-term based concepts of Skinner and Marks. One of ordinary skill in the art would have been motivated to do so for the benefit of increased accuracies in valuing search terms (see also “Advantages” beginning on page 7).

Claim 2: Skinner discloses wherein obtaining quantitative data associated with the concept comprises obtaining quantitative data associated with the demand for one or more of the terms of the set of search terms (see ¶¶ 12 and 37-38, disclosing obtaining demand based on impressions, clicks, and sales; ¶ 48, disclosing obtaining competitor demand information).

Claim 3: Skinner discloses wherein obtaining quantitative data associated with the concept comprises obtaining quantitative data associated with the demand for one or more of the terms of the set of search terms for use in advertising (see ¶¶ 12 and 38, disclosing obtaining data related to advertising and marketing).

Claim 4: Skinner discloses measuring the demand for use in advertising based on one or more amounts paid for use in advertising (see ¶ 48, disclosing obtaining competitor bid information).

Claim 5: Skinner discloses measuring the demand for use in advertising based on one or more amounts paid for use in advertising, wherein the use in advertising comprises obtaining one or more rights to have an advertisement included in results from one or more computerized searches using at least one of the terms of the term set (see id.).

Claim 6: Skinner discloses operating on the data by using the data in at least one mathematical formula (see ¶¶ 44-45 and 50-60).

Claim 7: Skinner discloses collecting quantitative data relating to one or more Pay-Per-Click auctions (see ¶¶ 5, 8, 20, and 39).

Claim 9: Skinner discloses taking at least one measure to prevent intentional manipulation of the value of the concept (see ¶ 44, disclosing requiring a minimum threshold of actions to ensure accurate data; ¶ 37: lines 11-12, disclosing removing duplicate data).

Claim 10: Skinner discloses taking at least one measure to maintain liquidity (see ¶¶ 16 and 21, disclosing eliminating bid gaps and preventing overbidding, which serve to maintain liquidity in an advertiser's account).

Claim 11: Skinner does not explicitly disclose operating on the data by using a median click calculation, and comprising omitting from the median click calculation one or more highest and lowest price quantities.

However, Skinner teaches determining a number of clicks per time period (see ¶ 38) and using that to determine a reasonable estimate of the expected clicks for a future time period (see ¶ 43: lines 10-11).

Examiner takes Official Notice that it is well known in the statistical arts to average a set of data, including using a median value, over past time periods in order to determine an expectation for future time periods. Furthermore, Examiner takes Official Notice that it is well known in the statistical arts to omit outliers of highest and lowest values from a median calculation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known statistical methods in conjunction with the click data disclosed by Skinner. One of ordinary skill in the art would have been motivated to do so for the benefit of a more accurate prediction.

Claim 12: Skinner does not explicitly disclose omitting from the median click calculation the same number of highest price quantities as lowest price quantities. Examiner takes Official Notice that it is well known in the statistical arts to eliminate an equal number of outliers from a median calculation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known statistical methods in conjunction with the

click data disclosed by Skinner. One of ordinary skill in the art would have been motivated to do so for the benefit of a more accurate prediction.

Claim 13: Claim 13 is substantially similar to claims 1 and 9, and is rejected under similar rationale.

Claim 14: Claim 14 is substantially similar to claim 11 and is rejected under similar rationale.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Flake (US 2005/0021461), directed to the same subject matter as the present application

Search Engines and Term Valuation

- Veach (US 7,349,876), directed to assigning prices to key words
- Anderson (US 7,136,875), directed to delivering advertisements based on bids associated with key words
- Rebane (US 2004/0088241), directed to an automated keyword bidding system, and disclosing many of the claimed quantitative statistics

Grouping/Clustering/Categorizing Search Terms

- Szabo (US 2006/0288023), directed to classifying items for search engines

- Wical (US 5,940,821), disclosing concept knowledge base queries and a knowledge base storing categories of associated search terms that have a common theme
- Ausborn (US 5,056,021), disclosing determining abstracted meanings from natural language words and categories between words

Concept-Based Instruments (Prediction Markets, Information Markets, Idea Futures)

- Berg, Joyce E. and Thomas A Rietz. "Prediction Markets as Decision Support Systems." *Information Systems Frontiers* 5:1, 79-93, 2003 (January).
- Hanson, Robin. "Idea Futures." 1996. <http://hanson.gmu.edu/ideafutures.html>

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos
Examiner
Art Unit 3623

NRK
11/24/08
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